

### **3.9 CULTURAL RESOURCES**

Cultural resources, also called heritage resources or historic properties, include resources significant in American history, architecture, archaeology, engineering, and traditional culture. Historic properties can be archaeological sites, historic architecture and engineering, or resources of heritage significance to Native Americans and other cultural groups. Historic properties may be districts, sites, buildings, structures, or objects.

The significance of historic and cultural properties lies both in their heritage and scientific value. Historic sites and historic architecture and engineering are embodiments of a technological and historical heritage. Archaeological sites are the raw material from which scientists reconstruct specific events and general trends of prehistory and therefore have scientific value. Traditional cultural properties embody significant patterns of culture.

Several historic properties exist in the project vicinity, and construction of the proposed project could affect two properties potentially eligible for nomination to the National Register of Historic Places: the High Line and West Extension irrigation canals. In addition, excavation for the proposed power plant foundations, the various underground pipelines and new power poles could affect archaeological resources that are currently unknown.

#### **3.9.1 Affected Environment**

##### Cultural History

Native Americans occupied the project area for approximately 11,500 years prior to the arrival of European Americans in the early 19<sup>th</sup> century. They settled at favorable salmon fishing sites along the Columbia and lower Umatilla Rivers and also made use of upland areas on the Columbia Plateau and in the Blue Mountains for gathering food. Archaeological resources in the project area include the remains of riverside base settlements, as well as residential and short-term occupation sites in upland areas.

The aboriginal inhabitants of the project area were the Umatilla dialect group of the Sahaptin linguistic and cultural entity. The Umatilla occupied both sides of the Columbia River and the lower Umatilla River Basin. The Sahaptin-speaking peoples occupied the central Columbia and, lower Snake River Basins. Umatilla economy depended on the harvesting of anadromous fish, the hunting of large and small mammals, and the gathering of starchy roots and berries for storage. The Umatilla signed a treaty in 1855, ceding their traditional territory to the United States government in exchange for reservation lands located approximately 48 kilometers (30 miles) east of Hermiston.

Historic era exploration of the project area began with the Lewis and Clark Expedition of 1805 to 1806. A few years later, the Pacific Fur Company and its successors, including the Northwest and Hudson's Bay companies, began sending trading parties up and down the Columbia River from forts at Astoria, Vancouver, NezPerce, Okanogan, and Spokane.

The European American settlement of the Pacific Northwest began with the first use of the Oregon Trail by emigrants in 1844. The earliest sustained European American settlement in the project area occurred when the town of Umatilla was founded in the 1860s to serve as a shipping point on the Columbia River to supply the Clearwater gold rush in northern Idaho (Brawley 1991). The construction of the transcontinental railroad in 1884 improved access to agricultural markets and stimulated emigration. Local area farmers began building irrigation works as a series of small diversions in the Umatilla River bottoms during this period. In 1905, Congress authorized the Umatilla Project, which included the Cold Springs and McKay storage dams and a network of irrigation canals. The town of Hermiston grew significantly as a result of the Umatilla Project.

### Known Historic Resources

Prior to initiation of field work, a record search and literature review were conducted for the project area. Research included a review of ethnographic and historic literature and maps and a search of archaeological base maps, site records, and survey reports on file at the Oregon State Historic Preservation Office in Salem, Oregon. This review indicated that no cultural resources have previously been documented for the proposed power plant site and its related pipeline and transmission line alignments.

A number of studies have been conducted in the general vicinity of the project. Most have focused on the old townsite of Umatilla (35UM1; 35UM35), a major prehistoric and historic occupation site on the Columbia River at the mouth of the Umatilla River (CTUIR 1998; Minor and Toepel 1986; Rice 1971). This site is located more than 1.6 kilometers (1.0 mile) north of the nearest proposed project facilities and underlies the present city of Umatilla.

Other known sites in the vicinity include a multi-component site atop Hermiston Butte (35UM9), a small lithic scatter located along the Umatilla River (35UM58), and an historic can dump on the Umatilla Chemical Depot (35UM16). None of these sites is located near the components of the proposed project. With the exception of sites 35UM 9 and 16, all the known cultural resources are closely associated with the Columbia or Umatilla rivers.

Two additional properties were identified in the course of cultural resources studies for the existing Hermiston Generating Plant, which is located about 0.8 kilometer (0.5 mile) east of the proposed project site (CTUIR and Heritage Research Associates, 1992, 1994). They are the High Line Canal, also called the Westland B Canal, and the West Extension Canal. The High Line Canal, located

about 8 kilometer (5 miles) southwest of Hermiston, is an irrigation ditch that is part of the U.S. Bureau of Reclamation's Umatilla Project, constructed between 1907 and 1916. It measures 5 meters (15 feet) wide and 2 meters (5 feet) deep and would be crossed by the proposed natural gas pipeline. The Oregon State Historic Preservation Officer has determined that portions of the Umatilla Project are eligible for the National Register of Historic Places (NRHP), given the project's role in regional agricultural development and because it is a well preserved example of an early twentieth-century irrigation system.

The West Extension Canal was constructed in 1914, also as part of the U.S. Bureau of Reclamation's Umatilla Project. It extended the irrigation system west from Umatilla to Irrigon and areas east of Boardman. Although it is not a part of the Umatilla Project that has been determined eligible for listing on the NRHP, it is a system that serves a similar and parallel function and may be eligible under the same criteria. The proposed transmission line crosses this canal about one mile south of Umatilla.

Another historic feature of note in the vicinity of the proposed project is the Oregon Trail. The Oregon Trail is the wagon road from St. Louis, Missouri to the Willamette Valley of Oregon by which European American settlers entered the Pacific Northwest between the 1840s and 1870s. It runs 2.4 kilometers (1.5 miles) south of the southerly extremity of the proposed natural gas pipeline. Agriculture has destroyed most of this section of the Oregon Trail.

In addition to the record search and literature review, representatives of the Confederated Tribes of the Umatilla Indian Reservation were contacted by letter and telephone to solicit potential Native American concerns about the proposed project. They have not expressed any concerns about the proposed project.

### Site Inventory Results

Archaeologists conducted an intensive historic properties survey of the proposed power plant site and the natural gas and electrical transmission line rights-of-way in September 2000. Follow-up surveys were made in October 2000 and January 2001. No new cultural resources were found.

### **3.9.2 Environmental Consequences and Mitigation Measures**

Construction and operation of the Umatilla Generating Project could affect two known cultural resources, the High Line Canal and the West Extension Canal. Other undiscovered cultural resources could also be affected by the proposed project.

### Impact 3.9.1 Known cultural resources could be adversely affected by the proposed project.

Assessment of Impact The proposed natural gas pipeline alternatives must pass over or under the High Line Canal. To avoid any adverse effects on the canal, this section of the pipeline would be installed by horizontal boring or jacking under the canal rather than trenching through it. Horizontal boring involves drilling a hole under the canal and then pushing a pipe section through it. Jacking involves driving a pipe section under the canal using jacks. A reconductored electrical transmission line would pass over the West Extension Canal. None of the activities associated with reconductoring the transmission line would affect the canal.

Recommended Mitigation Measures No measures beyond those included in the proposed project are recommended.

### Impact 3.9.2 Unknown cultural resources could be adversely affected by the proposed project.

Assessment of Impact The possibility exists that currently unknown properties of cultural significance to Native Americans or other cultural resources could be disturbed during construction of the proposed project. Excavation may uncover subsurface resources or reveal resources covered by vegetation during the field surveys. While discoveries are possible, they are relatively unlikely because the area affected by the proposed project is some distance away from watercourses where the highest density of resources would be expected and because much of the area has been cultivated or otherwise disturbed.

Construction personnel would be instructed in the identification of cultural materials and directed to halt ground-disturbing activities in the vicinity of a find until a qualified archeologist could evaluate the significance of the find. If significant cultural materials are found, recommendations for mitigation measures would be made in consultation with the Oregon State Historic Preservation Office and other appropriate parties. Mitigation measures could include avoidance or data recovery.

Recommended Mitigation Measures No measures beyond those included in the proposed project are recommended.

### **3.9.3 Cumulative Impacts**

The proposed project would have no adverse effect on cultural resources and consequently would not contribute to cumulative impacts on this environmental element.